

REMARKS**1.) Claim Rejections – 35 U.S.C. §103**

Claims 1 and 5 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,028,851 issued to Persson et al. (hereinafter "Persson") in view of U.S. Patent No. 5,367,533 issued to Schilling (hereinafter "Schilling"). Before addressing this rejection in detail, it should be noted that the Examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. MPEP 2142. To establish *prima facie* case of obviousness, certain criteria must be met. One criterion requires the prior art reference or references when combined must teach or suggest all the claim limitations. With such requirement in mind, Applicants respectfully traverse this rejection per discussion below.

Regarding independent claim 1, the Examiner relies on Persson to disclose every limitation of such claim except for the "dynamic voice call admission" limitation, which the Examiner relies on Schilling for such disclosure. In addition to not disclosing the "dynamic voice call admission" limitation, Persson also fails to disclose other limitations of claim 1. For example, the Examiner cites *column 8, lines 1-14* of Persson for disclosing the claim limitation regarding "*admitting the voice call if the sum of the channel power level for voice calls upon admission and the current channel power level for data calls is less than a power maximum and if, upon admission, a sufficient reserved power is available to admit at least one additional data call.*" Such reliance on Persson is incorrect based on the discussion below.

According to the cited section, a mobile station, which is seeking access to one of the surrounding base stations, calculates a new total interference $I_{\text{tot,new}}$ potentially experienced at each surrounding base station if the mobile station were to transmit at a certain necessary transmit power to achieve access at a given data rate (see FIG. 4, reference number 105). The mobile station then compares $I_{\text{tot,new}}$ to I_{max} (reference numbers 102 and 106), which is the maximum total interference that each surrounding base station could handle, and thereafter, the mobile station either would access the network if $I_{\text{tot,new}}$ is less than I_{max} (reference number 109) or would not access the network if $I_{\text{tot,new}}$ is greater than I_{max} (reference number 107). *In contrast*, the present

inventive method admits a voice call based on conditions that are different from the condition "if $I_{tot,new}$ is less than I_{max} ." For example, the present invention focuses on **channel power levels** associated with voice and data calls to determine whether a voice call should be admitted while Persson focuses on the potential **interference level** at a base station to determine whether the mobile station should be admitted. Channel power and interference are obviously different. For example, assuming there is enough channel power to admit another mobile station, the admitted mobile station may not be able to communicate with a serving base station if the interference at the serving base station exceeds the serving base station's interference limit. See, e.g., Persson, *Abstract and column 4, lines 40-58.*

In addition, the present inventive method admits a voice call based on the following **two conditions**: [1] if the sum of the channel power level for voice calls upon admission and the current channel power level for data calls is less than a power maximum and [2] if, upon admission, a sufficient reserved power is available to admit at least one additional data call. In contrast, Persson decides whether a mobile station should access the network based on only **one condition**, i.e., if $I_{tot,new}$ is less than I_{max} .

Accordingly, independent claim 1 is believed to be non-obvious and patentably distinguishable over Persson in view of Schilling because the cited prior art references, alone or in combination, fail to teach or suggest every limitation of claim 1 as discussed above.

Regarding independent claim 5, it includes limitations that are similar to those of independent claim 1 and thus such claim 5 is also believed to be non-obvious and patentably distinguishable over Persson in view of Schilling for the same reasons as those discussed above regarding claim 1.

Claims 9 and 19 stand rejected under U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,643,521 issued to Bourgoin et al. (hereinafter "Bourgoin") in view of Persson. Before addressing this rejection in detail, it should be noted that the Examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. MPEP 2142. To establish *prima facie* case of obviousness, certain

criteria must be met. One criterion requires the prior art reference or references when combined must teach or suggest all the claim limitations. With such requirement in mind, Applicants respectfully traverse this rejection per discussion below.

Regarding independent claim 9, the Examiner relies on Bourgoin to disclose every limitation of such claim except for the "dynamic operating point for a maximum channel power" limitation, which the Examiner relies on Persson for such disclosure. Applicants respectfully disagree. Turning first to Bourgoin, assuming *arguendo* that it does disclose a power estimator such as estimation means 23, Bourgoin only discloses one power estimator and fails to suggest that a call admission monitor should have more than one power estimator. *See, e.g., Fig. 2.* In contrast, the present inventive call admission monitor has two power estimators – one for voice communications and another one for data communications. As for Persson, the section cited by the Examiner discloses a traditional closed loop power control method in which a mobile station seeking access to a base station would continue to upwardly vary its transmission power P until t_2 at which time it receives access acknowledgement from the base station. *See FIG. 1 and column 4, line 59 – column 5, line 8.* Thereafter, the base station would instruct the mobile station to decrease its transmission power level to value P_3 , which is the minimum value necessary to maintain a desired level of communication quality between the mobile station and the base station. *Column 5, line 8-12.* In summary, this cited section of Persson focuses on how the **mobile station's transmission power** is varied from the time the mobile station is seeking access to the base station to the time communication is established between the mobile station and the base station. Thus, assuming *arguendo* there is motivation to combine Bourgoin and Persson, such combination might disclose a call admission monitor to admit additional communications based on a dynamic operating point for a **mobile station's transmission power**. In contrast, the present inventive call admission monitor is configured to admit additional voice or data communications based on a configurable dynamic operating point for a **maximum channel power**, which is clearly different from mobile station's transmission power. For example, fundamentally a channel is not the same as a mobile station and also, channel power could be used to support many

mobile stations while motile station's transmission power could only be used that particular mobile station.

Accordingly, independent claim 9 is believed to be non-obvious and patentably distinguishable over Bourgoin in view of Persson because the cited prior art references, alone or in combination, fail to teach or suggest every limitation of claim 9 as discussed above.

Regarding independent claim 19, it includes limitations that are similar to those of independent claim 9 and thus such claim 19 is also believed to be non-obvious and patentably distinguishable over in Bourgoin view of Persson for the same reasons as those discussed above regarding claim 9.

2.) Allowable Subject Matter

Applicants greatly appreciate the Examiner's indication that claims 2-4, 6-8, 10-18 and 20-21 would be allowable if rewritten in independent form so as to include all of the limitations of the base claim and any intervening claims.

CONCLUSION

Claims 1-22 are presently standing in this patent application. In view of the foregoing remarks, each and every point raised in the Office Action mailed on April 21, 2004 has been addressed on the basis of the above remarks. Applicants believe all of the claims currently pending in this patent application to be in a condition for allowance. Reconsideration and withdrawal of the rejections are respectfully requested. However, should the Examiner believe that direct contact with Applicants' attorney would advance the prosecution of the application, the Examiner is invited to telephone the undersigned at the number given below.

Respectfully submitted,



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